

GenCore version 5.1.4-p5.4578
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OM protein - protein search, using sw model

Run on: March 13, 2003, 08:42:15 ; Search time 20.5 Seconds

(without alignments)
117.237 Million cell updates/sec

Title: US-09-913-524-1

Perfect score: 143

Sequence: 1 FWSPSALRLQRPPEPAHANCHR 25

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 segs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	143	100.0	366	1 A24248	inhibin alpha chain
2	135	94.4	360	1 A25732	inhibin alpha chain
3	131	91.6	364	1 MPRGA	inhibin alpha chain
4	131	91.6	366	1 JC1106	inhibin alpha chain
5	128	89.5	366	1 A40056	inhibin alpha chain
6	101	70.6	328	2 151215	inhibin alpha-subu
7	56	39.2	735	2 S61238	hypothetical prote
8	50	35.0	192	2 T09236	nitrogenase Nifz c
9	50	35.0	192	2 JC4207	nitrogenase Nifz c
10	50	35.0	365	2 E83800	hypothetical prote
11	50	35.0	528	2 S35272	hypothetical prote
12	50	35.0	577	2 T14315	dihydrofolate redu
13	49	34.3	63	2 152277	platelet-derived g
14	49	34.3	1650	2 S28721	hypothetical prote
15	49	34.3	2302	2 T14328	protein-tyrosine-p
16	48.5	33.9	323	2 S62085	hrpM protein - Pse
17	48.5	33.9	496	2 S26402	homeotic protein H
18	48	33.6	128	2 T44497	hypothetical prote
19	48	33.6	604	2 A9369	homeotic protein B
20	48	33.6	606	2 S1367	Om(1b) protein - f
21	47	32.9	303	2 T11206	spao protein - Sal
22	47	32.9	303	2 S37307	spao protein - Sal
23	47	32.9	303	2 AC0851	surface presentati
24	47	32.9	342	2 S61978	hypothetical prote
25	47	32.9	518	2 T05277	dihydrofolate redu
26	47	32.9	519	2 E84539	dihydrofolate redu
27	47	32.9	679	2 T19703	hypothetical prote
28	47	32.9	2504	1 A57788	enoyl-lacryl-carie
29	46.5	32.5	576	2 G96763	probable MAP kinas

30	46.5	32.5	613	2 JC7762	SOX-3 protein - gu
31	46.5	32.5	627	1 S40048	1,4-alpha-glucan b
32	46.5	32.5	876	2 T49801	hypothetical prote
33	46	32.2	200	2 S33160	GTP-binding protei
34	46	32.2	363	2 T39726	manopine biosynth
35	46	32.2	834	2 F83185	glycerol-3-phospha
36	46	32.2	1914	2 T42635	tenascin Y precurs
37	45.5	31.8	510	1 T07268	proteolactophyllid
38	45	31.5	95	1 W4K1HS	E4 protein - human
39	45	31.5	174	2 T48542	hypothetical prote
40	45	31.5	258	2 G84624	hypothetical prote
41	45	31.5	351	2 S58192	hypothetical prote
42	45	31.5	451	1 UBHUG	tubulin gamma chain
43	45	31.5	451	1 UBHUG	tubulin gamma chain
44	45	31.5	477	2 H83389	hypothetical prote
45	45	31.5	503	2 A83027	hypothetical prote

ALIGNMENTS

RESULT 1

A24248 Inhibin alpha chain precursor - human

C:Species: Homo sapiens (man)

C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 01-Dec-2000

C:Accession: A23556; B25947; A24248

R:Stewart, A.G.; Milborrow, H.M.; Ring, J.M.; Crowther, C.E.; Forage, R.G.
PDBS Lett. 206, 329-334, 1986

A:Title: Human Inhibin genes. Genomic characterisation and sequencing.

A:Reference number: A91366; MUID:87005283; PMID:3758355

A:Accession: A23556

A:Molecule type: DNA

A:Residues: 1-366 <SRP>

A:Cross-references: GB:X04445; NID:q33921; PIDN:CAA28040.1; PID:q1204105

R:Mayo, K.E.; Cerelli, G.M.; Spiess, J.; Rivier, J.; Rosenfield, M.G.; Evans, R.M.;
Proc. Natl. Acad. Sci. U.S.A. 83, 5849-5853, 1986

A:Title: Inhibin A-subunit cDNAs from porcine ovary and human placenta.

A:Reference number: A94116; MUID:86267350; PMID:3016724

A:Accession: B25947

A:Molecule type: mRNA

A:Residues: 1-366 <MAY>

A:Cross-references: GB:M13981; NID:q186410; PIDN:AA59166.1; PID:q307068

R:Maemon, A.J.; Niall, H.D.; Seeburg, P.H.
Biochem. Biophys. Res. Commun. 135, 957-964, 1986

A:Title: Structure of two human ovarian inhibins.

A:Reference number: A90123; MUID:86186863; PMID:3754442

A:Accession: A24248

A:Molecule type: mRNA

A:Residues: 16, 'V', 'I', 'S', '20', '46', 'SAS',

A:Cross-references: GB:M13144; NID:q186412; PIDN:AA59167.1; PID:q186413

C:Comment: Activins A and B are homodimers of inhibin beta-A or inhibin beta-B, res

bin beta-A and beta-B, respectively.

C:Genetics:

A:Gene: GDB:IMHA

A:Cross-references: GDB:120100; OMIM:147380

A:Map position: 2q33-q36

A:Introns: 90/1

A:Superfamily: Inhibin

C:Keywords: glycoprotein; gonad; heterodimer; hormone

F:1-18/Domain: signal sequence #status predicted <SIG>

F:19-232/Domain: signal sequence #status predicted <PRO>

F:233-366/Product: inhibin alpha chain #status predicted <MAT>

F:146,268,302/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 100.0%; Score 143; DB 1; Length 366;

Best Local Similarity 100.0%; Pred. No. 2,2e-12;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FWSPSALRLQRPPEPAHANCHR 25

DB 240 FWSPSALRLQRPPEPAHANCHR 264

RESULT 2

A25732

inhibin alpha chain precursor - bovine

C:Species: Bos primigenius taurus (cattle)

C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999

C:Accession: A25732; S50897; A30161; A61548

R:Porage, R.G.; Ring, J.M.; Brown, R.W.; McInerney, B.V.; Cobon, G.S.; Gregson, R.P.; Ro

Proc. Natl. Acad. Sci. U.S.A. 83, 3091-3095, 1986

A:Title: Cloning and sequence analysis of cDNA species coding for the two subunits of in

A:Reference number: A94097; MUID:86205842; PMID:3458167

A:Accession: A25732

A:Molecule type: mRNA

A:Residues: 1-360 <FOR>

A:Cross-references: GB:M13273; NID:q163194; PIDN:AA57414.1; PID:q163195

A:Note: part of this sequence, including the amino end of the mature protein, was confir

R:Thompson, D.A.; Cronin, C.N.; Martin, F.

Eur. J. Biochem. 226, 751-764, 1994

A:Title: Genomic cloning and sequence analyses of the bovine alpha-, beta(A)- and beta(B

Y DNase I footprinting.

A:Reference number: S50897; MUID:95112839; PMID:7813465

A:Accession: S50897

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-87 <THO>

A:Cross-references: EMBL:U16237; NID:q563744; PIDN:AA60262.1; PID:q563745

R:Sugino, K.; Nakamura, T.; Takio, K.; Titani, K.; Miyamoto, K.; Hasegawa, Y.; Igarashi,

Biochem. Biophys. Res. Commun. 159, 1323-1329, 1989

A:Title: Inhibin alpha-subunit monomer is present in bovine follicular fluid.

A:Reference number: A30161; MUID:89193729; PMID:2930562

A:Accession: A30161

A:Molecule type: protein

A:Residues: 18-37;227-246 <SUO>

R:Rukuda, M.; Miyamoto, K.; Hasegawa, Y.; Nomura, M.; Igarashi, M.; Kangawa, K.; Matsuo,

Mol. Cell. Endocrinol. 44, 55-60, 1986

A:Title: Isolation of bovine follicular fluid inhibin of about 32 Kda.

A:Reference number: A61548; MUID:86136989; PMID:3081385

A:Accession: A61548

A:Molecule type: protein

A:Residues: 227-230 <PUK>

C:Comment: Inhibin suppresses follicle-stimulating hormone secretion.

C:Superfamily: Inhibin

C:Keywords: disulfide bond; glycoprotein; gonad; heterodimer; hormone

F:1-17/Domain: signal sequence #status predicted <SID>

F:18-226/Domain: propeptide #status predicted <PRO>

F:227-360/Product: inhibin alpha chain #status predicted <MAT>

F:140,266/Binding site: carboxylate (Asn) (covalent) #status predicted

Query Match 94.4% Score 135; DB 1; Length 360;

Best Local Similarity 92.0% Pred. No. 2; 9e-11;

Matches 23; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 PMSPALRLQRPPEPAHANCHR 25

Db 234 PMSPALRLQRPPEPAHANCHR 258

RESULT 3

WEPGA

inhibin alpha chain precursor - pig

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 30-Jun-1987 #sequence_revision 30-Jun-1987 #text_change 18-Jun-1999

C:Accession: A01392; A25947

R:Masson, A.J.; Hayflick, J.S.; Ling, N.; Esch, F.; Deno, N.; Ying, S.Y.; Guillemin, R.;

Nature 318, 659-663, 1985

A:Title: Complementary DNA sequences of ovarian follicular fluid inhibin show precursor

A:Reference number: A93371; MUID:86092207; PMID:2417121

A:Accession: A01392

A:Molecule type: mRNA

A:Residues: 1-354 <MAS>

A:Cross-references: GB:X03265; NID:q1999; PIDN:CAA27019.1; PID:q2000

R:Mayo, K.E.; Cerelli, G.M.; Spess, J.; Rivier, J.; Rosenfeld, M.G.; Evans, R.M.; Vale,

Proc. Natl. Acad. Sci. U.S.A. 83, 5849-5853, 1986

A:Title: Inhibin A-subunit cDNAs from porcine ovary and human placenta.

A:Reference number: A94116; MUID:86287350; PMID:3016724

A:Accession: A25947

A:Molecule type: mRNA

A:Residues: 1-119,'R',121-124,'A',126-364 <MAT>

A:Cross-references: GB:M13980; NID:q164518; PIDN:AA431057.1; PID:q164519

C:Comment: The mature protein is the carboxyl-terminal segment of a precursor polype

C:Comment: forms of inhibin have been isolated (A and B) that differ in the amino-ter

C:Comment: inhibin is secreted by ovaries or testes and inhibits the secretion of f

C:Superfamily: Inhibin

C:Keywords: contraceptive; follicleotropin inhibitor; glycoprotein; gonad

F:1-17/Domain: signal sequence #status predicted <SID>

F:18-230/Domain: propeptide #status predicted <PRO>

F:231-364/Product: inhibin alpha chain #status predicted <MAT>

F:144,266/Binding site: carboxylate (Asn) (covalent) #status predicted

Query Match

Best Local Similarity 91.6% Score 131; DB 1; Length 360;

Matches 22; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1 PMSPALRLQRPPEPAHANCHR 25

Db 238 PMSPALRLQRPPEPAHANCHR 262

RESULT 4

JCI106

inhibin alpha chain precursor - mouse

C:Species: Mus musculus (house mouse)

C:Date: 10-Sep-1999 #sequence_revision 01-Dec-2000 #text_change 01-Dec-2000

R:Su, J.G.W.; Hsueh, A.J.W.

Biochem. Biophys. Res. Commun. 186, 293-300, 1992

A:Title: Characterization of mouse inhibin alpha gene and its promoter.

A:Reference number: JCI106; MUID:92337610; PMID:163772

A:Accession: JCI106

A:Molecule type: DNA

A:Residues: 1-164,'R',166-366 <SUO>

A:Cross-references: GB:W95525; NID:q198404; PIDN:AA439314.1; PID:q459875; GB:M95526

R:Tone, S.; Katoh, Y.; Fujimoto, H.; Togashi, S.; Yanazawa, M.; Kato, Y.; Higashina

Differentiation 44, 62-68, 1990

A:Title: Expression of inhibin alpha-subunit gene during mouse gametogenesis.

A:Reference number: A60490; MUID:91071531; PMID:2253839

A:Accession: A60490

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 49-366 <TON>

A:Cross-references: GB:X55957; NID:q296843; PIDN:CAA9424.1; PID:q296838

A:Experimental source: Swiss Webster

R:Albano, R.M.; Greene, N.; Smith, J.C.

Development 117, 711-723, 1993

A:Title: Activins are expressed in preimplantation mouse embryos and in ES and EC c

A:Reference number: 148243; MUID:94321614; PMID:8330535

A:Accession: 148243

A:Status: preliminary; translated from GB/EMBL/DDBU

A:Molecule type: mRNA

A:Residues: 1-170,'V',172-335,'T',337-366 <ALB>

A:Cross-references: EMBL:X69618; NID:q49936; PIDN:CAA49324.1; PID:q49937

C:Comment: This protein inhibits the secretion and synthesis of follicle-stimulating

C:Comment: This alpha chain is linked by two disulfide bonds to the beta-A chain in

C:Genetics:

A:Introns: 91/1

C:Superfamily: Inhibin

C:Keywords: glycoprotein; gonad; heterodimer

F:1-20/Domain: signal sequence #status predicted <SID>

F:21-233/Domain: propeptide #status predicted <PRO>

F:234-366/Product: inhibin alpha chain #status predicted <MAT>

F:147,269/Binding site: carboxylate (Asn) (covalent) #status predicted

Query Match

Best Local Similarity 91.6% Score 131; DB 1; Length 360;

Matches 23; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 PMSPALRLQRPPEPAHANCHR 25
|||||
Db 241 PMSPALRLQRPPEPAHANCHR 265

RESULT 5

inhibin alpha chain precursor - rat
A:Accession: A40056
C:Species: Rattus norvegicus (Norway rat)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 08-Dec-2000
C:Accession: A41398; A40056; A40905
R:Peng, Z.M.; Li, Y.P.; Chen, C.L.C.
Mol. Endocrinol. 3, 1914-1925, 1989
A:Title: Analysis of the 5'-flanking regions of rat inhibin alpha- and beta-B-subunit genes
A:Reference number: A41398; MUID:90190649; PMID:2628729
A:Accession: A41398
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-366 <FEN>
A:Cross-references: GB:M32754; GB:M32755; NID:g204939; PIDN:AAA41437.1; PID:g204941
R:Woodruff, T.K.; Meunier, H.; Jones, P.B.C.; Heuch, A.J.W.; Mayo, K.E.
Mol. Endocrinol. 1, 561-568, 1987
A:Title: Rat inhibin: molecular cloning of alpha- and beta-subunit complementary deoxyribo-
A:Reference number: A40056; MUID:91042598; PMID:3153478
A:Accession: A40056
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-366 <WOO>
A:Cross-references: GB:M36453; NID:g204934; PIDN:AAA41435.1; PID:g204935
R:Esch, F.S.; Shimasaki, S.; Cooksey, K.; Mercado, M.; Mason, A.U.; Ying, S.Y.; Ueno, N.
Mol. Endocrinol. 1, 388-396, 1987
A:Title: Complementary deoxyribonucleic acid (cDNA) cloning and DNA sequence analysis of
A:Reference number: A40905; MUID:90331931; PMID:2484214
A:Accession: A40905
A>Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-366 <ESC>
A:Superfamily: inhibin
C:Keywords: glycoprotein
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-233/Domain: propeptide #status predicted <PRO>
F:234-366/Product: inhibin alpha chain #status predicted <MAT>
F:147,269/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 89.5%; Score 128; DB 1; Length 366;
Best local Similarity 88.0%; Pred. No. 2,86-10;
Matches 22; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
OY 1 PMSPALRLQRPPEPAHANCHR 25
|||||
Db 241 PMSPALRLQRPPEPAHANCHR 265

RESULT 6

inhibin alpha-subunit precursor - chicken
A:Accession: 151215
C:Species: Gallus gallus (chicken)
C:Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 17-Mar-2000
R:Wang, S.Y.; Johnson, P.A.
Biol. Reprod. 49, 453-458, 1993
A:Title: Complementary deoxyribonucleic acid cloning and sequence analysis of the alpha-
A:Reference number: 151215; MUID:94002740; PMID:8399835
A:Accession: 151215
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-328 <WAN>
A:Cross-references: GB:S65963; NID:g430815; PID:g430816
C:Superfamily: inhibin

Query Match 70.6%; Score 101; DB 2; Length 328;
Best local Similarity 72.0%; Pred. No. 1,58-06;
Matches 18; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

OY 1 PMSPALRLQRPPEPAHANCHR 25
|||||
Db 219 PMSPALRLQRPPEPAHANCHR 243

RESULT 7

hypothetical protein - bovine herpesvirus 1
A:Accession: S61238
C:Species: bovine herpesvirus 1
C:Date: 18-Sep-1997 #sequence_revision 18-Sep-1997 #text_change 26-Aug-1999
R:Vitek, C.; Benes, V.; Lu, Z.; Kutish, G.F.; Paces, V.; Rock, D.; Letchworth, G.J.
submitted to the EMBL Data Library, January 1995
A:Description: Nucleotide sequence analysis of a 30-kb region of the bovine herpesv-
A:Reference number: S61233
A:Accession: S61238
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-735 <VLC>
A:Cross-references: EMBL:Z48053; NID:g971311; PIDN:CAA88116.1; PID:g971317
C:Genetics:
A:Introns: 341/3
C:Superfamily: herpesvirus 38k protein

Query Match 39.2%; Score 56; DB 2; Length 735;
Best local Similarity 55.0%; Pred. No. 6,3;
Matches 11; Conservative 1; Mismatches 8; Indels 0; Gaps 0;
OY 5 SALRLQRPPEPAHANCH 24
|||||
Db 116 SALRLQRPPEPAHANCH 135

RESULT 8

nifz protein - Frankia alni
A:Accession: T09236
C:Species: Frankia alni
C:Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999
R:Benson, D.R.
submitted to the EMBL Data Library, November 1998
A:Reference number: Z16624
A:Accession: T09236
A>Status: translated from CH/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-192 <REN>
A:Cross-references: EMBL:L29294; NID:g3953454; PID:g497435
A:Experimental source: strain cp11
C:Genetics:
A:Gene: nifz
C:Keywords: nitrogen fixation

Query Match 35.0%; Score 50; DB 2; Length 192;
Best local Similarity 31.4%; Pred. No. 11;
Matches 11; Conservative 6; Mismatches 4; Indels 14; Gaps 1;
OY 3 SPALRLQRPPEPAHANCH 23
|||||
Db 102 APAAVLVAEKVPAPPAHAGAGHAKTKHGSANC 136

RESULT 9

nifrogenase Nifz chain - Frankia sp.
N:Alternate names: Nifz protein
C:Species: Frankia sp.
C:Date: 10-Sep-1995 #sequence_revision 27-Oct-1995 #text_change 22-Oct-1999
R:Harriott, O.T.; Hosted, T.J.; Benson, D.R.
Gene 161, 63-67, 1995
A:Title: Sequences of nifz, nifw, nifz, nifz and two ORF in the Frankia nitrogen fi-
A:Reference number: J04203; MUID:95369734; PMID:7642138

A:Accession: J04207
 A:Molecule type: DNA
 A:Residues: 1-192 <HAR>
 A:Cross-references: GB:U29299; NID:q497430; PIDN:AAC02974.1; PID:q497435
 C:Comment: This protein has an Ala and Pro rich region at its carboxyl-terminal region.
 C:Genetics:
 A:Gene: nifZ
 C:Keywords: nitrogen fixation

Query Match 35.0%; Score 50; DB 2; Length 192;
 Best Local Similarity 31.4%; Pred. No. 11;
 Matches 11; Conservative 6; Mismatches 4; Indels 14; Gaps 1;

QY 3 SPSSALRLQRPPEPAH-----ANC 23
 DB 102 APRAVVAEKVPAPPAHAGCAATCKHGSANC 136

RESULT 10
 E83800
 hypothetical protein BH1205 [imported] - Bacillus halodurans (strain C-125)
 C:Species: Bacillus halodurans
 C>Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001
 C:Accession: E83800
 R:Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fujii, F.; Hirai
 Nucleic Acids Res. 28, 4317-4331, 2000
 A:Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and
 A:Reference number: A83650; M01D:20512582; PMID:11058132
 A:Cross-references: GR:AP001511; GB:BA000004; NID:g1017727; PIDN:BAB04924.1; GSPDB:GN00
 A:Accession: E83800
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-365 <STO>
 A:Cross-references: GR:AP001511; GB:BA000004; NID:g1017727; PIDN:BAB04924.1; GSPDB:GN00
 C:Genetics:
 A:Gene: BH1205

Query Match 35.0%; Score 50; DB 2; Length 365;
 Best Local Similarity 61.1%; Pred. No. 22;
 Matches 11; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 2 WSPSALRLQRPPEPAH 19
 DB 324 WSGGTRLRQDGEENGA 341

RESULT 11
 S35272
 dihydrofolate reductase (EC 1.5.1.3) / thymidylate synthase (EC 2.1.1.45) - carrot
 C:Species: Daucus carota (carrot)
 C>Date: 10-Dec-1993 #sequence_revision 19-Jan-1996 #text_change 18-Jun-1999
 C:Accession: S35272; S32242
 R:Luco, M.; Piffanelli, P.; Rastelli, L.; Cella, R.
 Plant Mol. Biol. 22, 427-435, 1993
 A:Title: Molecular cloning and analysis of a cDNA coding for the bifunctional dihydrofo
 A:Reference number: S35272; M01D:93320381; PMID:8329682
 A:Accession: S35272
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-528 <LUO>
 A:Cross-references: EMBL:217306; NID:q288614; PIDN:CA078954.1; PID:q288615
 C:Superfamily: bifunctional dihydrofolate reductase-thymidylate synthase; thymidylate sy
 C:Keywords: methyltransferase; NADP; oxidoreductase
 F:23-146/Domain: type I dihydrofolate reductase homology <DFR>
 F:244-528/Domain: thymidylate synthase homology <TDS>

Query Match 35.0%; Score 50; DB 2; Length 528;
 Best Local Similarity 43.5%; Pred. No. 31;
 Matches 10; Conservative 2; Mismatches 3; Indels 8; Gaps 1;

QY 2 WSPSALRLQRPPEPAHANCH 24
 DB 396 WNPSDRLRMALP-----CH 410

RESULT 12
 T14315

dihydrofolate reductase (EC 1.5.1.3) / thymidylate synthase (EC 2.1.1.45) - carrot
 N:Contains: dihydrofolate reductase (EC 1.5.1.3); thymidylate synthase (EC 2.1.1.45)
 C:Species: Daucus carota (carrot)
 C>Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-Jul-2000
 C:Accession: T14315; S49321
 R:Luco, M.; Piffanelli, P.; Rastelli, L.; Cella, R.
 Plant Mol. Biol. 22, 427-435, 1993
 A:Title: Molecular cloning and analysis of a cDNA coding for the bifunctional dihydro
 A:Reference number: S35272; M01D:93320381; PMID:8329682
 A:Accession: T14315
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-577 <LUO>
 A:Cross-references: EMBL:AJ003139; NID:q3097055; PIDN:CA05895.1; PID:q3097056
 R:Luco, M.; Orsi, R.; Cella, R.
 Submitted to the EMBL Data Library, May 1994
 A:Description: Plastidial localization of the bifunctional dihydrofolate reductase-
 A:Reference number: S49321
 A:Accession: S49321
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-49 <LUO>
 A:Cross-references: EMBL:Z33383; NID:q556699; PID:q556700
 C:Genetics:
 A:Introns: 24/3; 192/2; 325/3; 340/3; 362/3; 383/2; 408/2; 463/3; 505/1; 541/3
 A:Note: DHFR-TS
 C:Function:
 A:Description: bifunctional enzyme catalyzes the reduction of folate into tetrahydr
 A:Note: bifunctional enzyme in plants and protozoan
 C:Superfamily: bifunctional dihydrofolate reductase-thymidylate synthase; thymidylat
 C:Keywords: methyltransferase; multifunctional enzyme; NADP; oxidoreductase
 F:72-195/Domain: type I dihydrofolate reductase homology <DFR>
 F:293-577/Domain: thymidylate synthase homology <TDS>

Query Match 35.0%; Score 50; DB 2; Length 577;
 Best Local Similarity 43.5%; Pred. No. 34;
 Matches 10; Conservative 2; Mismatches 3; Indels 8; Gaps 1;

QY 2 WSPSALRLQRPPEPAHANCH 24
 DB 445 WNPSDRLRMALP-----CH 459

RESULT 13
 I52277
 platelet-derived growth factor A-chain (novel form) - rat (fragment)
 C:Species: Rattus sp. (rat)
 C>Date: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 12-Aug-1996
 C:Accession: I52277
 R:Peng, L.; Xia, Y.; Tang, W.W.; Wilson, C.B.
 Biochem. Biophys. Res. Commun. 194, 1453-1459, 1993
 A:Title: Cloning a novel form of rat PDGF A-chain with a unique 5'-UT: regulation d
 A:Reference number: I52277; M01D:93356827; PMID:8352804
 A:Accession: I52277
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-63 <RES>
 A:Cross-references: GB:S64556; NID:q404583

Query Match 34.3%; Score 49; DB 2; Length 63;
 Best Local Similarity 42.9%; Pred. No. 5, 2;
 Matches 9; Conservative 2; Mismatches 10; Indels 0; Gaps 0;

QY 2 WSPSALRLQRPPEPAHANCH 22
 DB 38 WQPSGARLERPAPSPCRAS 58

